

ECE-345-001 (Fall 2020)

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Review Test Submission: Quiz 3.3

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Course	Intro to Control Systems - Fall 2020 Section Group I67
Test	Quiz 3.3
Started	9/3/20 1:21 AM
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Status	Completed
Attempt Score	4 out of 4 points
Time Elapsed	1 minute
Results Displayed	Submitted Answers, Incorrectly Answered Questions

Question 1

1 out of 1 points



For the RLC series circuit with applied voltage $v(t)$, which of the following best describes why $\begin{bmatrix} v_c(t) \\ v(t) \end{bmatrix}$ cannot be a state vector?

Selected Answer:

The applied voltage $v(t)$ is an input.

Question 2

1 out of 1 points



The state equation for the RLC series circuit was derived from which of the following (more than one may be correct)?

Selected Answers:

The circuit equation that arose from Kirchoff's voltage law.

Question 3

1 out of 1 points



The output equation from the RLC series circuit was derived from which of the following (more than one may be correct)?

Selected Answer:

The definition of the output as the voltage across the capacitor.

Question 4

1 out of 1 points



Is it possible to have an output equation $y(t) = v_c(t) + 3$?

Selected Answer:

No, because only the state and the input can appear on the right-hand side of the output equation.